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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/419,749	10/16/1999	TAD A. DEFFLER	22074661-255	1735
26453	7590	05/06/2005	EXAMINER	
BAKER & MCKENZIE LLP 805 THIRD AVENUE - 29TH FLOOR NEW YORK, NY 10022			COLBERT, ELLA	
			ART UNIT	PAPER NUMBER
			3624	

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/419,749

Applicant(s)

DEFFLER ET AL

Examiner

Ella Colbert

Art Unit

3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-9 are pending. Claims 1, 3-5, and 7-9 have been amended in this communication filed 01/31/05 entered as Request for Extension of time and Response to Non-Final Action.
2. The 35 USC 112 second paragraph rejection has been overcome for claims 4 and 8 by Applicants' amendment and is hereby withdrawn. However, the 35 U.S.C. 112 second paragraph rejection remains for claims 1, 3, 5, 7, and 9 as set forth here below.
3. The Objection to the Abstract has been overcome by Applicants' amendment to the Abstract and is hereby withdrawn.
4. The amendments to the Specification have been considered and have been overcome by Applicants' amendment to the Specification and is hereby withdrawn.
5. Applicants' amendments to claims 1, 3, 5, 7, 8, and 9 have overcome the Objections to claims 1, 3, 5, 7, 8, and 9 and is hereby withdrawn.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. How the keyword registry is built dynamically is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicants' Specification does not say the keyword registry/repository is being built dynamically. The Specification merely reads on page 4 "... a mechanism for

Art Unit: 3624

dynamically registering new macro commands in a registry is also provided for allowing for extensibility. To register new macro commands, ... in the registry for execution by the extensible macro language.” This is interpreted as merely “dynamically registering the macro commands”. There is nothing reading the “keyword registry or repository is built dynamically” or how the “keyword registry or repository is built dynamically”.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 3, 5, 7, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has steps left out of the claim language. Claim 1, line 3, does not say who or what is “analyzing a macro language expression”. Claims 5 and 7 have a similar problem. Is the computer or a program or a user “analyzing the macro language expression”? Line 11, reads “executing the code,”. This claim limitation is very vague and unclear.

Do Applicants’ mean “executing the code of instructions to run the extended macro command”?

Clarification in the claim language is respectfully requested.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3624

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aho, Alfred; Sethi, Ravi; and Ullman, Jeffery D., hereafter Aho in view of Peter Hyde, hereafter Hyde in view of (US 5,295,059) Brooks et al, hereafter Brooks and further in view of (US 5,742,828) Canady et al, hereafter Canady.

With respect to claim 1, Aho teaches, analyzing a macro language expression (page 6, sec. 1.2, lines 1-6), determining based on predetermined syntax of a macro language, one or more keywords in the analyzed macro language expression (page 6, sec. 1.2, lines 7-25, page 7, lines 1-21, page 12, sec. 1.3, lines 1-25, and page 13), the keyword representing an extended macro command initially unknown to the macro language (page 183, Sec. 4.4, paragraph 1), and executing the executable code associated with the keyword (page 16, Sec. 1.4, lines 1-39, page 17, Sec. 1.4, lines 1-20). Aho failed to teach, wherein the extended macro command is executed without recompiling the macro language. However, this step is well known in the art and performed at runtime and it is not a recompilation but it is a copy as many times as it (the macro) is called. There are three different types of macros, such as preprocessor, compiler, and runtime. A preprocessor macro is defined as for example, the C preprocessor is a macro processor that is used automatically by the C compiler to transform the program before actual compilation; compiler macros are defined as controlling the state of the macro with compiler command options; and a runtime macro is defined as tells the runtime intercept how to identify the construct to converted differently and how to render or convert it to the alternative result which usually results in runtime macros that are executed by conversion code at runtime. Hyde teaches,

wherein the extended macro command is executed without recompiling the macro language page 9, paragraph 1 – page 10, paragraph 8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the extended macro command executed without recompiling the macro language and to modify in Aho because such a modification would allow Aho to have a direct benefit of using the macros and components to keep the HTML separate from the logic and major changes can often be made –remotely or directly on the server – without even shutting down the Web application. Aho failed to teach, retrieving an executable code associated with the keyword from a registry of keywords, the registry of keywords being built dynamically to include the extended macro command. It would have been obvious at the time the invention was made to one having ordinary skill in the art of keywords to retrieve an executable code associated with the keyword from a registry of keywords, the registry of keywords being built dynamically to include the extended macro command and in view of Aho's teaching of keywords in the macro language on page 183, Sec. 4.4, lines 7-14 to incorporate in Aho a registry of keywords because it is well known in the art that the C language itself has a registry of 33 keywords with the keywords being used in the source code and compiling of the macro language.

With respect to claim 2, Aho teaches, extending the registry of keywords by inserting a new keyword representing a new macro command and a code associated with the new keyword (page 212, Sec. 4.6, paragraphs 1 and 2). A registry of keywords because it is well known in the art that the C language itself has a registry of 33 keywords with the keywords being used in the source code and compiling of the macro language, *supra*.

With respect to claims 3, Aho teaches, a parser having a predefined syntax determining one or more extended keywords embedded within a macro language expression, the extended keyword representing a newly extended command initially unknown to a macro language (page 7, Sec. 1.2, lines 22-31, pages 40-47, page 48, Sec. 2.4, paragraphs 1 and 2, and page 283, paragraphs 3 and 4). It is well known in the art of programming that by definition a macro expands or is extended and is compiled initially at runtime.

Aho failed to teach, a keyword registry of keywords having one or more keywords and one or more associated codes and a macro handler coupled to the parser for receiving an extended keyword from the parser, the macro handler in response to the received extended keyword, retrieving a code of instructions associated with the received extended keyword from the keyword registry of keywords, the keyword registry of keywords being built dynamically to include the extended command and executing the code of instructions to run the extended command represented by the extended keyword. Canady teaches, a keyword registry of keywords having one or more keywords and one or more associated codes (col. 5, lines 51-63) and Brooks teaches, a macro handler coupled to the parser for receiving an extended keyword from the parser, the macro handler in response to the received extended keyword, retrieving a code of instructions associated with the received extended keyword from the keyword registry of keywords, the keyword registry of keywords being built dynamically to include the extended command and executing the code of instructions to run the extended command represented by the extended keyword (col. 8, lines 3-68 and col. 9, lines 1-

Art Unit: 3624

60). It would have been obvious at the time the invention was made to a person having ordinary skill in the art of extended keywords to have a parser and code associated with the extended keywords and to incorporate in Aho because such a modification is well known in the art and would enhance Aho's extended keywords with the parser receiving the keyword first, then parsing the expression and the macro handler in response saving the previous contents of the processor registers (keywords) during execution of the main program with the user selecting the functions and submitting the macro command to run the code associated with the keywords with a prefix symbol.

With respect to claim 4, Aho teaches, a keyword registry of keywords augmented to include one or more new keywords and one or more associated codes (page 193, Sec. 4.4, paragraph 3.

With respect to independent claim 5, this claim is rejected on grounds corresponding to the reason given above for rejected independent claim 1. Applicant's claim 5 has a method for parsing a macro language expression with steps corresponding to the method in rejected claim 1.



With respect to claim 6, Aho teaches, wherein the code includes machine operable instructions (page 128, Sec. 3.7, paragraph 3.8 and page 129 –page 130, paragraph 1).

With respect to claim 7, this independent claim is rejected on grounds corresponding to the reason given above for rejected independent claim 1. Applicants' claim 7 has a method for providing extensible macro language with steps corresponding to the method in rejected claim 1.

With respect to claim 8, this independent claim is rejected on grounds corresponding to the reason given above for rejected independent claim 3. Applicants' claim 8 has a system for providing an extensible macro language with steps corresponding to the system in rejected claim 3.

With respect to claim 9, this independent claim is rejected on grounds corresponding to the reason given for rejected independent claims 1 and 7. Applicants' claim 9 has a program storage device readable by a machine ... to perform method steps of extending a macro language with steps corresponding to the method of claims 1 and 7.

### ***Response to Arguments***

11. Applicant's arguments filed 01/31/05 have been fully considered but they are not persuasive.

Issue no. 1: Applicants' argue: The Office Action maintains that the Specification does not specify that a keyword registry/repository is built dynamically and does not specify how the keyword registry/repository is built dynamically and the

Art Unit: 3624

Applicants' disagree has been considered but is not persuasive. Response: In the Office Action of 07/04/04, the Specification, at page 4 does not recite in the language that the keyword registry/repository is built dynamically or how it is specifically built dynamically. For example, this section should read "In the present invention, a keyword registry/repository is built using a mechanism for dynamically registering new macro commands ...".

Issue no. 2: Applicants' argue: Applicants' maintain that the claim (the claim term) is sufficiently definite, since the examiner understood that said analyzing can be performed by a computer program or a person has been considered but is not persuasive. Response: The Examiner disagrees. The claim should read "the computer program analyzing the macro language expression" for clarity of the claim limitation.

Issue no. 3: Applicants' argue: Hyde, "White Paper: Creating Applications With Web HubVCL", (1985) pp. 1-19 is not prior art to Applicants' invention because Hyde is a Web Page printed on March 31, 2000 and this application was filed on October 16, 1999 has been considered but is not persuasive. Response: The reference clearly states, "In 1995, HREF Tools Corp. brought to market a product know as Web Hub ...". March 32, 2000 11:40:54 GMT is the date and time the reference was retrieved off the Internet by the searcher/Examiner and not the priority date of the reference. The invention dates back to 1995, therefore, the reference is considered prior art.

Issue no. 4: Applicants' argue: Applicants' do not find teaching or suggestion in the cited art of a method for providing an extensible macro language, ..." has been

Art Unit: 3624

considered but is not persuasive. Response: It is interpreted that Aho et al. teaches analyzing a macro language expression, the keyword representing an extended (expanded) macro command ..., executing the code, extending (expanding) the registry of keywords ..., a parser having a predefined defined syntax determining one or more extended keywords embedded within a macro language expression , ..."; Hyde teaches, the extended macro command is executed without recompiling the macro language; Canady teaches a registry of keywords having one or more keywords and one or more associated codes; Brooks teaches, a macro handler coupled to the parser for receiving the extended (expanded) keyword from the parser, the macro handler in response to the received extended (expanded) keyword form the keyword registry, the keyword registry being built dynamically to include the extended command and executing the code of instructions to include the extended (expanded) command represented by the extended (expanded) keyword as discussed above in the rejection of claims 1-9.

Conclusion: A conclusion of obviousness is established "from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference." *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969). Also see MPEP 2144 entitled "Sources of Rationale Supporting a Rejection Under 35 U.S.C. 103: RATIONALE MAY BE IN A REFERENCE, OR REASONED FROM COMMON KNOWLEDGE IN THE ART, SCIENTIFIC PRINCIPLES, ART – RECOGNIZED EQUIVALENTS, OR LEGAL PRECEDENT."

The Examiner carefully drew up a correspondence of each of Applicants' claimed limitations, one or more referenced passages in Aho et al, Hyde, Canady, and Brooks,

Art Unit: 3624

what is well known in the art of macro languages and computer programming and what is obvious to one having ordinary skill in the art at the time the invention was made.

The Examiner is entitled to give limitations their broadest reasonable interpretation in light of the Specification (see below):

2111 Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

*During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).<*

### **Conclusion**

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Inquiries**

Art Unit: 3624

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741.

The examiner can normally be reached on Monday-Thursday, 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'E. Colbert', with a stylized flourish at the end.

E. Colbert  
April 30, 2005